ornamentalist; while the press cries, again and again, "We are inferior in talent of design to foreign ornamentalists:" give a proper position: teach the manufacturer, what is difficult for him to comprehend, as he has no soul above money, that the artist asks for *honour* (as one means of making money if the trader choose), and that a bank-note may pay for a *drawing*, but not for *invention*; and then the English artist will be able to fight his way.

Only when they cannot help themselves do the manufacturers apply to the few men who profess design,—the pupils of other days—of such men as Sheringham, and Boileau, and Dumont, and Belanger: and when they do go thither it is without a purse, and the waste of time in bargaining becomes greater than the value of that occupied in work, and unless the artist get the money before he deliver the goods he may have them returned, after being copied, with the assertion, made true by the theft, "That they are literally valueless." One slight resource the young men have,—the Registration Act; but how it works the office itself can best answer; and I leave to some other victim the task of exposing its faults. One deficiency is the want of nominal entry, i. e., until the design be used or sold, for a fee of 1s., for an unlimited period.

I do hope to see before my death *an exhibition of designs, shown by the designers themselves*.

To conclude, after all these years of experience and vicissitudes, I have left off very nearly where I began,—a discontented bachelor; for I was too much vexed to go on in harness any longer, since last week, when, I having designed a frame for a lady's tapestry, the upholsterer, on putting the work in the carving, ingeniously placarded it as "a screen of his own making." A Worn-out File.

THE LADIES' CARPET.

Such a crowding of pretty bonnets, with prettier faces under them, as there was last week in the great room in John-street, Adelphi (a Society of Hearts on that occasion, shall we say?) has not been often seen. A hundred and fifty ladies had conspired to produce the carpet which was there hung up, and they each brought their hundred and fifty friends to look at it and abuse,—if they dared. There have been several carpets made in Berlin wool work by the contributions of many different ladies, chiefly for churches; but these have been composed of different geometrical designs, each complete in itself, and were easily put together. The idea of producing one large design, cutting it into parts, and which, when worked, could be joined together in such manner as to form one ornamental subject of architectural character, is a new one; and it is this which distinguishes the work before us, originated by Mr. W. B. Simpson, and designed by Mr. J. W. Papworth.

Bowers of roses, trellis work, covered with hollyoaks, over a sky ground, often seen, were thought to be very unsuitable things to walk upon. Flatness of surface was the object desired, though not wholly gained; and a design of inlaid work, scattered profusely with flowers (the latter a *sine qua non* with the lady-workers), was prepared. The full-sized pattern, 30 feet by 20 feet, was then painted exactly as it was to be worked; and when finished—which took many months—it was resolved, instead of having the painting transferred to squared paper, with the stitches arranged for the executants to follow mechanically, to cut up the original painting, and lithograph the stitches on it—a process which, although it gave some trouble to the workers, saved the expense of the transfer, and insured the copying the neutral and other tints unknown to Berlin workers in general.

We have heard some objections to the course, but must leave the learned in wools to settle the question. There is much that we can legitimately praise in the work,—the wreath of flowers on a light ground, forming part of the border, in particular. We could have spared the union-jack and shields at the angles, and are disposed to think, that if the whole had been surrounded by a border of darker colour, it would have given richness at present somewhat wanting. It is so admirably joined, that the junctions can scarcely be discovered.

ON THE LAWS OF COLOUR.

Mr. Grace Calvert's paper at the Society of Arts, on the Laws of Colour with reference to the effective arrangements of fabrics in the Great Exhibition, excited much interest. In the course of it the lecturer said, that to understand the laws of colours it is necessary to know the composition of light. Newton was the first person to give to the world any statement relative to the composition of light which he said was composed of seven colours—red, orange, green, blue, indigo, and violet. But it is distinctly proved, at the present day, that, in reference to this, Newton deceived himself: it was, however, sufficient to the immortal Newton to have shown us that light was composed of seven colours, and it was then for us to discover that four of these seven colours are produced by various proportions and combinations of the three colours now known as the primitive colours, viz.,—red, blue, and yellow. Thus, blue and red combined produce purple or indigo. Blue and yellow produce green. White, red, and yellow, produce orange. These facts being known, it is easy to prove that there are not seven but three primitive colours, and four secondaries, or what I shall call completing colours. Several proofs can, however, be given that light is composed of three colours only. One of the most simple consists in placing pieces of blue, red, and yellow papers on a circular disc and rotating it rapidly, the effect to the eye being to produce a disc of white light. If, therefore, the eye can be deceived so rapidly, while the disc proceeds at so slow a rate, what must necessarily be the case when it is remembered that light travels at the rate of 190,000 miles a second. Therefore, the rapidity with which light travels is such that we are not able, with the eye, to perceive either the blue, yellow, or red, the sensitiveness of the nerves of the retina of the eye not being rapid enough to receive and convey successively to the mind the three or seven colours composing light. Newton was not, however, satisfied with such an experiment as this; he made several others, and found, that when rays of light underwent a refraction or deviation from the straight line, equal to an angle of sixty degrees (as is the case when they are passed through a prism), light was decomposed, as he considered, into seven primitive colours. But it may be said that this is no proof that light is composed of these colours. Do they not result from the influence of the prism itself? Newton satisfactorily resolved this question. He found that if, instead of allowing the rays and decomposed light to travel far enough from the spectrum, he passed them through what is called the double convex lens, and then received them on a mirror or reflector at a certain distance, a white instead of a coloured spectrum was seen. There can, consequently, remain no doubt that light is composed of seven colours, three of which are primary and four completing colours. Before entering into the laws of colours, Mr. Crace Calvert stated that it might be interesting to know what scientific minds had devoted attention to the laws of colours.

Buffon followed Newton, and his researches had special reference to what Mr. Chevreul had called the successive contrasts of colours.

Father Scherffer, a monk, also wrote on the laws of colour. Goethe, the poet, also brought his mind to bear upon the subject, and studied it to a great extent. Count Romford, a Scotch philosopher, about the end of the eighteenth century, published several memoirs on the laws of colours. He explained very satisfactorily the "successive" contrast, and arrived at some insight into the "simultaneous" one: still he did not lay down its real laws.

Prieur, Leblanc, Harris, and Field, were also writers of most interesting works on this subject. The reason that they did not arrive at the definite laws of colour, was because they had not divided these laws into successive, simultaneous, and mixed contrasts. These form the basis of the practical laws of colour, and the honour of their discovery is due to Mr. Chevreul.

The motive why a surface appears to us white or brilliant is, that a large portion of the light which falls on its surface is reflected on the retina, and in such a quantity as gives to the surface a brilliant aspect; whilst in plain white surfaces, the rays of light being diffused in all directions, and a small portion only arriving to the eye, the surface does not appear brilliant. The influence of colours on these two kinds of surfaces is very different, as may be perceived by the examples round the room, showing the influence of different colours on gold ornaments. When rays of light, instead of being reflected, are absorbed by a surface or substance, they appear black; therefore white and black are not colours, as they are due to the reflection or absorption of undecomposed light. It is easy to understand why a surface appears to us to be blue; that is due to the property which the surface has to reflect only blue rays, whilst it absorbs the yellow and red rays; and if a certain portion of light be reflected with one of the coloured rays, it will decrease its intensity: thus red rays with white ones produce pink. On the contrary, if a quantity of undecomposed light be absorbed, black is produced, which, by tarnishing the colour and making it appear darker, generates dark reds, blues, or yellows. The secondary colours are produced by one of the primitive colours being absorbed and the two others reflected: for example, if red be absorbed, and blue and yellow reflected, the surface appears green. There are two reasons why we can never see a perfect blue, yellow, red, &c. The first is, that surfaces cannot entirely absorb one or two rays and reflect the others. The second is, that when the retina receives the impression of one colour, immediately its complementary colour is generated: thus, if a blue circle be placed on a perfectly grey surface, an orange hue will be perceived round it; if an orange circle, round it will be noticed a bluish tint; if a red circle, a green; if a greenish-yellow circle, a violet; if an orange-yellow circle, an indigo; and *vice versâ*.

The next point was that of the different contrasts of colours. The "successive" contrast has been known; and it consists in the fact, that if you look steadfastly for a few minutes on a red surface fixed on a white sheet of paper, and then carry your eye to another white sheet, you will perceive on it not a red but a green one; if green, red; if purple, yellow; if blue, orange. The "simultaneous" contrast is the most interesting and useful to be acquainted with.

When two coloured surfaces are in juxtaposition, they mutually influence each other, —favourably, if harmonising colours, or in a contrary manner if discordant; and in such proportion in either case as to be in exact ratio with the quantity of complementing colour which is generated in our eye: for example, if two half-sheets of plain tint-paper—say one dark-green, the other red—are placed side by side on a grey piece of cloth, the colours will mutually improve in consequence of the green separated by the red surface adding itself to the green of the juxtaposed surface, thus increasing its intensity, and in its turn the green augments the beauty of the red, and which effect can easily be appreciated if two other half-sheets of paper of the same colours be placed at a short distance from their corresponding influenced ones:—

RED RED-GREEN GREEN.

It is not sufficient to place complementing colours side by side to produce harmony of colour, the respective intensities having a most decided influence: thus pink and light-green agree—red and dark-green also; but light-green and dark-red, pink and dark-green, do not; therefore, to obtain the maximum of effect and with perfect harmony the following colours must be placed side by side, taking into account their exact intensity of shade and tint:—